

Fig. 3 is a schematic plot of glass transition temperature, T_g , for the materials used in Fig. 2;

Fig. 4 is a plot showing installation data for a cable design of the invention.

Detailed Description of the Invention

The following describes cabling optical fibers at high cabling speeds, and wherein the coatings are of good quality, with improved characteristics for air-blown installation. The method used to apply the cabling material in this description is to apply the coating material as a prepolymer, and cure the prepolymer using UV light. Other coating methods are known and may be used. For example, optical fiber cable coatings may be produced using extrusion.

Optical fiber cable may be coated with an inner coating and an outer coating. The dual coatings are applied in tandem or simultaneously (using a two compartment and dual die applicator). In the tandem method, a first coating layer is applied, and cured, and the second coating layer is applied over the cured first layer, and cured. In the simultaneous dual coating arrangement, both coatings are applied in a prepolymer state, and cured simultaneously.

For UV cured cabling materials, the prepolymer materials are UV curable polyacrylates. These polymers are sufficiently transparent to UV curing radiation, i.e., wavelengths typically in the range 200 - 400 nm, to allow full curing at high draw speeds. Other transparent coating materials, such as alkyl-substituted silicones and silsesquioxanes, aliphatic polyacrylates, polymethacrylates and vinyl ethers have also been used as UV cured coatings. See e.g. S. A. Shama, E. S. Poklacki, J. M. Zimmerman "Ultraviolet-curable